CLAIMS

1. A process for producing 2-O-α-glucopyranosyl-L-ascorbic acid, comprising the steps of:

allowing α-isomaltosyl glucosaccharide-forming enzyme together with or without cyclomaltodextrin glucanotransferase (EC 2.4.1.19) to act on a solution comprising L-ascorbic acid and α-glucosyl saccharide to form 2-O-α-glucopyranosyl-L-ascorbic acid; and

collecting the formed 2-O-α-glucopyranosyl-L-ascorbic acid.

2. The process of claim 1, where glucoamylase (EC 3.2.1.3) is allowed to act on the reaction mixture after the action of α-isomaltosyl glucosaccharide- forming enzyme on said solution together with or without cyclomaltodextrin glucanotransferase.

3. The process of claim 1 or 2, where 5-O-α-glucopyranosyl-L-ascorbic acid and 6-O-α-glucopyranosyl-L-ascorbic acid are not formed or formed in such a small amount that they can not be detected in the step of forming 2-O-α-glucopyranosyl-L-ascorbic acid.

4. The process of any one of claims 1 to 3, wherein said α-glucosyl saccharide is one or more saccharides selected from the group consisting of maltooligosaccharide, maltodextrin, cyclodextrin, amylose, amylopectin, soluble starch, liquefied starch, gelatinized starch, and glycogen.

5. The process of any one of claims 1 to 4, where the reaction mixture contains, on a dry solid basis, 2-O-α-glucopyranosyl-L-ascorbic acid in an amount of 10 w/w % or higher; and 5-O-α-glucopyranosyl-L-ascorbic acid and 6-O-α-glucopyranosyl-

L-ascorbic acid in an amount of less than 0.1 w/w %.

6. The process of any one of claims 1 to 5, wherein the step of collecting 2-o-a-glucopyranosyl-L-ascorbic acid comprises a step of using a strongly-acidic cation exchange resin, and optionally further comprises a step of pulverizing or crystallizing.

7. The process of any one of claims 1 to 6, where the formed 2-O-α-glucopyranosyl-L-ascorbic acid is collected in a form of syrup, powder, or crystal in its collecting.

8. A method for effecting a transferring reaction on L-ascorbic acid by allowing α-isomaltosyl glucosaccharide-forming enzyme with or without cyclomaltodextrin glucanotransferase to act on a solution containing L-ascorbic acid and α-glucosyl saccharide to form 2-O-α-glucopyranosyl-L-ascorbic acid.

9. The method of claim 8, wherein said α-glucosyl saccharide is one or more saccharides selected from the group consisting of maltooligosaccharide, maltodextrin, cyclodextrin, amylose, amylopectin, soluble starch, liquefied starch, gelatinized starch, and glycogen.